

Related Structures

Sequences producing significant alignments:	Score (bits)	E	
bequeitees producting significant arignments.	(DICS)	value	
<u>gi 309818 gb AAA33784.1 </u> antigen	<u>32</u>	1.4	
<u>gi 22958582 ref ZP 00006250.1 </u> COG1360: Flagellar motor pro	<u> 29</u>	7.9	e e e e e e e e e e e e e e e e e e e
gi 20150316 pdb 1J4S A Chain A, Structure Of Artocarpin: A	28	14	
gi 26347287 dbj BAC37292.1 unnamed protein product [Mus mu	<u>28</u>	14	
gi 34873522 ref XP 220904.2 similar to hypothetical protei	2.8	19	
gi 309820 gb AAA33785.1 Antigen	28	19	
gi 16041188 dbj BAB69761.1 hypothetical protein [Macaca fa	. 28	19	
<pre>gi 34899222 ref NP 910957.1 alcohol dehydrogenase-like pro</pre>	<u> 28</u>	19	
<u>qi 31242129 ref XP 321495.1 </u> ENSANGP00000025339 [Anopheles	<u>27</u>	26	
gi 499385 emb CAA53511.1 collectin-43 [Bos taurus]	27	26	
gi 21436533 emb CAD29637.1 putative 5-oxoprolinase [Anophe	27	26	
gi 27923966 sp P42916 CL43_BOVIN Collectin-43 precursor (CL	<u>27</u>	26	
<u>gi 1083017 pir A53570</u> collectin-43 - bovine	<u>27</u>	26	
<pre>gi 6753710 ref NP_034228.1 opsin (encephalopsin); encephal</pre>	27	34	

	0.7	2.4	
gi 22971781 ref ZP 00018707.1 hypothetical protein [Chloro	27	34	
<pre>qi 31982388 ref NP_783630.2 conglutinin 1 [Bos taurus] >gi</pre>	27	46 46	******
gi 10719868 sp Q9QYC0 ADDA MOUSE Alpha adducin (Erythrocyte	<u>27</u>	46	200000 200000 2000000
<pre>gi 27676688 ref XP 218355.1 similar to hypothetical protei</pre>	<u>27</u>	46	
gi 34873860 ref XP 343971.1 similar to Mox-1 [Rattus norve	27		
gi 27711226 ref XP_213841.1 similar to RIKEN cDNA 1110002H	27	46	
gi 21706416 gb AAH34368.1 Add1 protein [Mus musculus]	27	46	2000
gi 12844579 dbj BAB26417.1 unnamed protein product [Mus mu	27	46	80.000
gi 7304861 ref NP 038485.1 adducin 1 (alpha) [Mus musculus	<u>27</u>	46	*****
gi 461774 sp P23805 CONG_BOVIN CONGLUTININ PRECURSOR >gi 34	27	46	88.28
gi 8850211 ref NP 058686.1 adducin 1, alpha [Rattus norveg gi 26988441 ref NP 743866.1 fumarylacetoacetate hydrolase	<u>27</u> <u>27</u>	46 46 ·	,
<pre>gi 29570599 emb CAD69922.1 surfactant protein D [Bos taurus] gi 14579673 gb AAK69357.1 pericentriolar material 1 protei</pre>	<u>27</u> 27	46 46	
gi 27923754 sp Q8MHZ9 CL46 BOVIN Collectin-46 precursor (CL	<u>27</u>	46	
gi 395268 emb CAA50665.1 conglutinin [Bos taurus]	27	46	
gi 6754680 ref NP 034921.1 mesenchyme homeobox 1 [Mus musc	27	46	
gi 1083589 pir S54147 alpha adducin - rat	<u>27</u>	46 46	
gi 19352357 ref NP 598115.1 OprJ protein [uncultured bacte	<u>27</u>	62	
<pre>qi 18959276 ref NP_036316.1 forkhead box D4-like 1 [Homo s qi 38081917 ref XP_132038.2 stromal interaction molecule 2</pre>	<u>26</u> 26	62	200000 200000
<pre>gi 38081917 ref XP 132038.2 stromal interaction molecule 2 gi 32405518 ref XP 323372.1 predicted protein [Neurospora</pre>	<u> 26</u> <u> 26</u>	62	1830068
gi 34451549 gb AAQ72339.1 FOXD4 [Gorilla gorilla]	<u> 26</u>	62	
gi 39979247 emb CAE85616.1 hypothetical protein [Neurospor	<u>26</u>	62 62	
gi 38648940 gb AAH63191.1 Unknown (protein for MGC:75588) gi 27378759 ref NP 770288.1 bll3648 [Bradyrhizobium japoni	<u>26</u> 26	83	
gi 7516461 pir E72614 hypothetical protein APE1374 - Aerop	26	83	,
gi 7025451 gb AAF35887.1 somatostatin receptor-interacting	<u> 26</u>	83	200000
gi 4850168 gb AAD04569.2 synaptic SAPAP-interacting protei	26	83	87388 8000000
gi 11968152 ref NP 057232.1 SH3 and multiple ankyrin repea	<u>26</u>	83	
gi 7519945 pir A58801 mannose-specific lectin KM+ - Artoca gi 4140029 dbj BAA36973.1 alpha 1 type I collagen [Cynops	<u>26</u> 25	83 112	
<u>gi 27734098 ref NP 775623.1 </u> Eph receptor B1 [Mus musculus]	_25	112	
qi 2739208 qb AAB94627.1 Eph-like receptor tyrosine kinase	25	112	
gi 26349347 dbj BAC38313.1 unnamed protein product [Mus mu	25	112	V===A
gi 10442535 gb AAG17360.1 interphotoreceptor retinoid bind	25	112	
<pre>gi 29655054 ref NP 820746.1 ferrous iron transport protein gi 9625581 ref NP 039832.1 Hypothetical protein [Human her</pre>	<u>25</u> 25	112 112	
gi 4758284 ref NP 004432.1 ephrin receptor EphB1 precursor	25	112	
gi 34870072 ref XP 213685.2 similar to CG33130-PA [Rattus	25	112	
qi 38089043 ref XP 133997.4 RIKEN cDNA 2310057J16 [Mus mus	25	112	
gi 38101266 gb EAA48254.1 hypothetical protein MG10317.4 [2.5	112	
gi 21224968 ref NP_630747.1 conserved hypothetical protein	<u>25</u> 25	112 112	
gi 4104411 gb AAD02030.1 Eph-like receptor tyrosine kinase	<u>49</u> 25	112	
<u>gi 34327988 dbj BAB67820.2 </u> KIAA1927 protein [Homo sapiens] gi 29179544 qb AAH48787.1 Similar to RIKEN cDNA 4930541M15	$\frac{25}{25}$	112	25k4688
gi 16121180 ref NP 404493.1 hypothetical protein [Yersinia	25	112	
gi 12328471 dbj BAB21131.1 P0416D03.19 [Oryza sativa (japo	<u>25</u>	112	188788
gi 27721289 ref XP 217250.1 similar to Ephrin type-B recep gi 23613524 ref NP 704545.1 erythrocyte membrane protein 1	<u>25</u> 25	112 112	
gi 29827065 ref NP 821699.1 hypothetical protein [Streptom	<u>25</u>	150	

<pre>gi 38045919 ref NP 005329.3 huntingtin interacting protein</pre>	25	150	
qi 15004817 ref NP 149277.1 Possible beta-xylosidase, fami	25	150	000000
<u>gi 20913895 ref XP_147630.1 </u> hypothetical protein XP_147630	<u> 25</u>	150	
gi 2499164 sp Q52992 YNF7 RHIME HYPOTHETICAL 25.1 KDA PROTE	<u>25</u>	150)00000K
gi 6678339 ref NP 033404.1 thrombomodulin [Mus musculus] >	<u>25</u>	150	
gi 28396081 gb AA039202.1 nuclear receptor NHR-114 [Caenor	<u> 25</u>	150	SARAN
gi 2072423 gb AAC51257.1 huntingtin interacting protein 1	<u>25</u>	150	
gi 755724 emb CAA88565.1 alpha-toxin [Clostridium novyi]	<u>25</u>	150	
gi 15234502 ref NP 192399.1 hypothetical protein [Arabidop	<u>25</u>	150	
gi 27960450 gb AA027833.1 nuclear receptor protein [Caenor	25	150	•
gi 21234145 ref NP 639722.1 hypothetical protein [Streptom	$\frac{25}{25}$.	150	
<u>gi 731074 sp P40349 URB1 USTMA</u> Siderophore biosynthesis reg <u>gi 2144160 pir S55805</u> alpha-toxin - Clostridium novyi (ATC	<u>25</u> 25	150 150	•
gi 17565736 ref NP_504164.1 nuclear Hormone Receptor (nhr	25_	150	
gi 5174543 ref NP 005910.1 MADS box transcription enhancer	24	201	
gi 30851578 gb AAH52428.1 Col15al protein [Mus musculus]	2.4	201	
qi 34896876 ref NP_909782:1 hypothetical protein [Oryza sa	24	201	2000000
gi 6978677 ref NP_037061.1 procollagen, type II, alpha 1;	24	201	
<u>gi 23018969 ref ZP 00058682.1 </u> COG0545: FKBP-type peptidyl	24	201	
<u>gi 7462033 pir T30910</u> xylanase (EC 3.2.1) - Caldocellum	24	201	2000001
gi 34879634 ref XP 214400.2 similar to collagen alpha 1(IV	24	201	\$5.50 3000000
gi 30842815 ref NP 783186.2 disrupted in schizophrenia 1 [24	201	
gi 18313160 ref NP 559827.1 3-hydroxy-3-methylglutaryl-coe	24	201	
<u>qi 23121576 ref ZP 00103825.1 </u> COG0243: Anaerobic dehydroge	24	201	
gi 18202034 sp 042350 CA21 RANCA Collagen alpha 2(I) chain	24	201	
<u>gi 38344719 emb CAE05261.2 </u> OSJNBb0115I09.23 [Oryza sativa	<u>24</u>	201	8788
qi 50502 emb CAA29946.1 unnamed protein product [Mus muscu	24	201	
gi 15241519 ref NP 199263.1 small nuclear ribonucleoprotei	24	201	389888
gi 33859528 ref NP_034061.1 procollagen, type IV, alpha 1	24	201	
<u>gi 18496907 ref NP 569757.1 </u> minor tail subunit gp21 [Mycob	24	201	
<u>gi 15241657 ref NP 195818.1 </u> zinc finger (C3HC4-type RING f	24	201	
gi 39997046 ref NP 952997.1 hypothetical protein GSU1948 [24	269	
gi 38100524 gb EAA47639.1 predicted protein [Magnaporthe g	24	269	887888
<u>gi 24981080 gb AAH39762.1 </u> Unknown (protein for IMAGE:40102	24	269	
<u>gi 16356979 ref NP 443630.1 ND6 15838</u> NADH dehydrogenase su	<u>24</u>	269	

Alignments

Get selected sequences Select all Deselect all

```
\square > gi \mid 309818 \mid gb \mid AAA33784.1 \mid antigen
Length = 386
```

Score = 31.6 bits (67), Expect = 1.4 Identities = 13/20 (65%), Positives = 13/20 (65%), Gaps = 3/20 (15%)

Query: 3 QGPAGSGWEEGSGSPPGVTP 22 , Q PAGS GSGSPP V P

Sbjct: 126 QAPAGSS---GSGSPPAVPP 142

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>gi|22958582|ref|ZP 00006250.1| COG1360: Flagellar motor protein [Rhodobacter sp
        Length = 366
Score = 29.1 \text{ bits (61)}, Expect = 7.9
Identities = 11/16 (68%), Positives = 13/16 (81%), Gaps = 2/16 (12%)
Query: 4 GPAGSGWEEGSGSPPG 19
         GPAG G EG+G+PPG
Sbjct: 189 GPAGPG--EGTGAPPG 202
Specificity (Form 1)
qi|20150317|pdb|1J4S|B .... Chain B, Structure Of Artocarpin: A Lectin With Mannose
        Specificity (Form 1)
gi|20150318|pdb|1J4S|C  Chain C, Structure Of Artocarpin: A Lectin With Mannose
        Specificity (Form 1)
gi|20150319|pdb|1J4S|D ...... Chain D, Structure Of Artocarpin: A Lectin With Mannose
        Specificity (Form 1)
        Length = 149
Score = 28.2 bits (59), Expect =
Identities = 8/11 (72%), Positives = 10/11 (90%)
Query: 4 GPAGSGWEEGS 14
        GP G+GW+EGS
Sbjct: 12 GPGGNGWDEGS 22
                             unnamed protein product [Mus musculus]
\square > gi | 26347287 | dbj | BAC37292.1 |
        Length = 280
Score = 28.2 \text{ bits } (59), \text{ Expect} = 14
Identities = 16/28 (57%), Positives = 17/28 (60%), Gaps = 9/28 (32%)
Query: 6 AGSGWE-EGSGS-----PPGVTPLFSP 26
        AGSG E EGS + PPG TP FSP
Sbjct: 34 AGSG-EAEGSSASSPSLPPPG-TPAFSP 59
Length = 747
Score = 27.8 bits (58), Expect = 19
Identities = 8/11 (72%), Positives = 10/11 (90%)
Query: 16 SPPGVTPLFSP 26
         SPPG +PLF+P
Sbjct: 112 SPPGASPLFTP 122
>gi|309820|gb|AAA33785.1| Antigen
        Length = 417
```

```
Score = 27.8 \text{ bits } (58), \text{ Expect} = 19
 Identities = 11/16 (68%), Positives = 11/16 (68%), Gaps = 3/16 (18%)
Query: 3 QGPAGSGWEEGSGSPP 18
          Q PAGS
                   GSGSPP
Sbjct: 160 QAPAGSS---GSGSPP 172
>gi|16041188|dbj|BAB69761.1| hypothetical protein [Macaca fascicularis]
          Length = 135
 Score = 27.8 \text{ bits } (58), \text{ Expect} = 19
 Identities = 14/28 (50%), Positives = 14/28 (50%), Gaps = 9/28 (32%)
Query: 4 GPAG-SGWEEGSGSP-----PGVTP 22
          GP G SGWE G SP
                                  P VTP
Sbjct: 83 GPVGASGWEAGCASPQPTSLTPYPRVTP 110
| >gi|34899222|ref|NP 910957.1| alcohol dehydrogenase-like protein~contains EST C7
           [Oryza sativa (japonica cultivar-group)]
          Length = 462
 Score = 27.8 \text{ bits } (58), \text{ Expect} = 19
 Identities = 12/19 (63%), Positives = 12/19 (63%), Gaps = 2/19 (10%)
Query: 5 PAGSGWEEGSGSPPGVTPL 23
          PAGSG E GSPP V L
Sbjct: 405 PAGSGRGE--GSPPAVKSL 421
>gi|31242129|ref|XP 321495.1| ENSANGP00000025339 [Anopheles gambiae]
 gi | 19572990 | emb | CAD28130.1 | putative 5-oxoprolinase [Anopheles gambiae]
 gi|30173744|gb|EAA43140.1|
                             ENSANGP00000025339 [Anopheles gambiae str. PEST]
          Length = 1344
 Score = 27.4 \text{ bits } (57), \text{ Expect = } 26
 Identities = 11/15 (73%), Positives = 12/15 (80%), Gaps = 3/15 (20%)
Query: 11 EEGSG-SPPG--VTP 22
          EEGSG +PPG VTP
Sbjct: 688 EEGSGQAPPGRLVTP 702
Length = 301
Score = 27.4 \text{ bits } (57), \text{ Expect} = 26
Identities = 15/26 (57%), Positives = 16/26 (61%), Gaps = 6/26 (23%)
Query: 1 GMQGPAG---SGWEEGSGSPPGVTP 22
                   SG +GS PPG TP
         GM GPAG
Sbjct: 50 GMPGPAGREGPSGR-QGSMGPPG-TP 73
```

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>gi|21436533|emb|CAD29637.1| putative 5-oxoprolinase [Anopheles gambiae]
         Length = 756
 Score = 27.4 \text{ bits } (57), \text{ Expect} = 26
 Identities = 11/15 (73%), Positives = 12/15 (80%), Gaps = 3/15 (20%)
Query: 11 EEGSG-SPPG--VTP 22
          EEGSG +PPG VTP
Sbjct: 644 EEGSGQAPPGRLVTP 658
gi|18252109|gb|AAL61855.1| 43kDa collectin precursor [Bos taurus]
 gi|18252111|gb|AAL61856.1| 43kDa collectin precursor [Bos taurus]
         Length = 321
 Score = 27.4 bits (57), Expect = 26
 Identities = 15/26 (57%), Positives = 16/26 (61%), Gaps = 6/26 (23%)
Query: 1 GMQGPAG----SGWEEGSGSPPGVTP 22
         GM GPAG
                   SG +GS PPG TP
Sbjct: 70 GMPGPAGREGPSGR-QGSMGPPG-TP 93
| >qi|1083017|pir||A53570 | collectin-43 - bovine
         Length = 301
 Score = 27.4 bits (57), Expect = 26
 Identities = 15/26 (57%), Positives = 16/26 (61%), Gaps = 6/26 (23%)
Query: 1 GMQGPAG----SGWEEGSGSPPGVTP 22
                   SG +GS PPG TP
         GM GPAG
Sbjct: 50 GMPGPAGREGPSGR-QGSMGPPG-TP 73
                              opsin (encephalopsin); encephalopsin [Mus musculu
>gi|6753710|ref|NP 034228.1|
                                 Opsin 3 (Encephalopsin) (Panopsin)
gi|18203573|sp|Q9WUK7|OPN3 MOUSE
                          encephalopsin [Mus musculus]
 gi|4894950|gb|AAD32670.1|
                            unnamed protein product [Mus musculus]
 gi | 26335541 | dbj | BAC31471.1 |
gi|27463274|gb|AA015719.1|
                            encephalopsin [Mus musculus]
         Length = 400
Score = 26.9 bits (56), Expect =
Identities = 11/24 (45%), Positives = 14/24 (58%), Gaps = 7/24 (29%)
Query: 10 WEEGSGS----PPGV---TPLFSP 26
                   ΡG
         WE+G+G+
                           PLFSP
Sbjct: 13 WEDGAGAEGAAPAGTRSPAPLFSP 36
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>gi|22971781|ref|ZP 00018707.1| hypothetical protein [Chloroflexus aurantiacus]